

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A method of manufacturing electrochemical sensors, the method comprising steps of:
 - (a) applying a plurality of working electrodes on a substrate;
 - (b) applying a plurality of counter electrodes on the substrate;
 - (c) positioning a spacer layer over the substrate and the working electrodes and the counter electrodes;
 - (d) overlaying the spacer layer with a second substrate;
 - (e) creating a sample chamber region within the spacer layer comprising a plurality of connected sample chambers between the substrate and the second substrate; and
 - (f) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode planar with at least one counter electrode on the substrate, the substrate and second substrate having generally a similar length and width, and at least one sample chamber between the substrate and the second substrate, the sample chamber having a volume of no more than about 1 microliter and continuous with the at least one sample chamber of an adjacent electrochemical sensor.
- 2-3. (canceled)
4. (previously presented) The method according to claim 1, wherein the step of positioning a spacer layer comprises:
 - (a) positioning an adhesive layer over the substrate having the electrodes.
5. (previously presented) The method according to claim 4, further comprising:
 - (a) applying a plurality of indicator electrodes on the substrate; and

- (b) wherein the step of separating a plurality of electrochemical sensors comprises:
 - (i) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode, at least one counter electrode, at least one indicator electrode, and at least one sample chamber.

6-17. (canceled)

18. (previously presented) The method according to claim 1, wherein the step of applying a plurality of working electrodes on a substrate comprises:

- (a) applying a plurality of working electrodes on a substrate by printing.

19. (previously presented) The method according to claim 18, wherein the step of applying a plurality of working electrodes on a substrate by printing comprises:

- (a) applying a plurality of working electrodes on a substrate by screen printing or ink jet printing.

20. (previously presented) The method according to claim 4, wherein the step of positioning an adhesive layer over the substrate having the electrodes is done before the step of creating a sample chamber region between the substrate having the electrodes and the second substrate.

21. (previously presented) The method according to claim 1, wherein the step of creating a sample chamber region between the substrate having the electrodes and the second substrate comprises:

- (a) removing a portion of the spacer layer; and then
- (b) positioning the spacer layer between the substrate having the electrodes and the second substrate to create the sample chamber region.

22. (previously presented) The method according to claim 1, wherein the step of creating a sample chamber region between the substrate having the electrodes and the second substrate comprises:

- (a) positioning the spacer layer over the substrate having the electrodes; and then
- (b) removing a portion of the spacer layer to create the sample chamber region.

23. (previously presented) The method according to claim 1, wherein the step of creating a sample chamber region comprising a plurality of connected sample chambers comprises:

- (a) creating a sample chamber region having a plurality of connected sample chambers each having a volume of no more than about 0.5 microliter.

24. (currently amended) A method of manufacturing electrochemical sensors, the method comprising steps of:

- (a) applying a plurality of working electrodes on a substrate;
- (b) applying a plurality of counter electrodes on the substrate;
- (c) forming a plurality of indicator electrodes on one of the substrate and a second substrate;
- (d) overlaying the working electrodes and the counter electrodes with a spacer layer;
- (e) creating a sample chamber region within the spacer layer comprising a plurality of connected sample chambers between the substrate;
- (f) overlaying the second substrate over the spacer layer; and
- (g) separating a plurality of electrochemical sensors, each electrochemical sensor comprising at least one working electrode planar with at least one counter electrode on the substrate, the substrate and second substrate having generally a similar length and width, at least one indicator electrode, and at least one sample chamber between the substrate and the second substrate, the sample chamber having a volume of no more than about 1 microliter and continuous with the at least one sample chamber of an adjacent electrochemical sensor.

25. (previously presented) The method according to claim 24, wherein the step of creating a sample chamber region between the substrate having the electrodes and the second substrate comprises:

- (a) removing a portion of the spacer layer; and then
- (b) positioning the spacer layer over the substrate having the electrodes to create the sample chamber region.

26. (previously presented) The method according to claim 24, wherein the step of creating a sample chamber region between the substrate having the electrodes and the second substrate comprises:

- (a) positioning the spacer layer over the substrate having the electrodes; and then
- (b) removing a portion of the spacer layer to create the sample chamber region.

27. (previously presented) The method according to claim 24, wherein the step of creating a sample chamber region comprising a plurality of connected sample chambers comprises:

- (a) creating a sample chamber region having a plurality of connected sample chambers each having a volume of no more than about 0.5 microliter.

28. (previously presented) The method according to claim 27, wherein the step of creating a sample chamber region comprising a plurality of connected sample chambers comprises:

- (a) creating a sample chamber region having a plurality of connected sample chambers each having a volume of no more than about 0.25 microliter.

29. (previously presented) The method according to claim 23, wherein the step of creating a sample chamber region comprising a plurality of connected sample chambers comprises:

- (a) creating a sample chamber region having a plurality of connected sample chambers each having a volume of no more than about 0.25 microliter.